



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D4148-1
Job Sheet 184967



Part No: D4148-1

Job Qty: 20 ea

Part Name: Crosstube Lug Plate, Fwd



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/19/18

Job Tracking No:

Due Date: 11/12/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV E SHEET 1 IPP Rev:A 10.06.24 new issue DD verf:EC IPP Rev:B 10.10.29 as per revC DD verf:EC
IPP REV:C 11.03.02 AS PER DWG REV.D DD VERF:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Waterjet	20 pcs		11/12/18	0.06	4.31	Waterjet 1		dc 18/10/20
110	QC	20 pcs		11/12/18	0.00	0.00	QC2 Waterjet-3		dc 18/10/20
120	QC	20 pcs		11/12/18	0.00	0.00	QC8-4		38
150	Packaging	20 pcs		11/12/18	0.00	0.00	Packaging3	57080 6	OCT 23 2018-89
160	QC21-SA	20 Ea		11/12/18	0.00	0.00	QC21	9-80 21 9-80	OCT 23 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M304S11GA	304/316 0.125 Sheet	7.2140 sf (.3607 ea)	100-Waterjet	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Waterjet	M304S11GA	7	43	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Fwd Crosstube Lug Plate	0.129Inches + 0.005 - 0.001	0.134 0.128		
2	Fwd Crosstube Lug Plate	0.191Inches + 0.005 - 0.001	0.196 0.190		
3	Fwd Crosstube Lug Plate	0.380Inches + 0.006 - 0.001	0.386 0.379		
4	Fwd Crosstube Lug Plate	0.257Inches + 0.006 - 0.001	0.263 0.256		
5	Fwd Crosstube Lug Plate	0.500Inches + 0.008 - 0.001	0.508 0.499		
6	Fwd Crosstube Lug Plate	0.940Inches ± 0.030	0.970 0.910		
7	Fwd Crosstube Lug Plate	4.470Inches ± 0.030	4.500 4.440		
8	Fwd Crosstube Lug Plate	0.750Inches ± 0.010	0.760 0.740		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

9	Fwd Crosstube Lug Plate	8.470Inches ± 0.030	8.500 8.440
10	Fwd Crosstube Lug Plate	8.096Inches ± 0.010	8.106 8.086
11	Fwd Crosstube Lug Plate	5.430Inches ± 0.030	5.460 5.400
12	Fwd Crosstube Lug Plate	5.197Inches ± 0.010	5.207 5.187
13	Fwd Crosstube Lug Plate	4.733Inches ± 0.010	4.743 4.723
14	Fwd Crosstube Lug Plate	0.310Inches ± 0.010	0.320 0.300
15	Fwd Crosstube Lug Plate	0.750Inches ± 0.010	0.760 0.740
16	Fwd Crosstube Lug Plate	0.375Inches ± 0.010	0.385 0.365
17	Fwd Crosstube Lug Plate	1.840Inches ± 0.030	1.870 1.810
18	Fwd Crosstube Lug Plate	0.920Inches ± 0.030	0.950 0.890
19	Fwd Crosstube Lug Plate	3.000Inches ± 0.010	3.010 2.990
20	Fwd Crosstube Lug Plate	0.750Inches ± 0.010	0.760 0.740
21	Fwd Crosstube Lug Plate	0.625Inches ± 0.010	0.635 0.615
22	Fwd Crosstube Lug Plate	1.982Inches ± 0.010	1.992 1.972
23	Fwd Crosstube Lug Plate	0.991Inches ± 0.010	1.001 0.981
24	Fwd Crosstube Lug Plate	0.770Inches ± 0.030	0.800 0.740
25	Fwd Crosstube Lug Plate	1.540Inches ± 0.030	1.570 1.510
26	Fwd Crosstube Lug Plate	2.470Inches ± 0.030	2.500 2.440
27	Fwd Crosstube Lug Plate	0.820Inches ± 0.030	0.850 0.790
28	Fwd Crosstube Lug Plate	3.570Inches ± 0.030	3.600 3.540
29	Fwd Crosstube Lug Plate	1.230Inches ± 0.030	1.260 1.200
30	Fwd Crosstube Lug Plate	0.730Inches ± 0.030	0.760 0.700
31	Fwd Crosstube Lug Plate	0.125Inches ± 0.010	0.135 0.115
32	Fwd Crosstube Lug Plate	0.252Inches + 0.030 - 0.000	0.282 0.252

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																																										
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																																																																																								
Description Work Order Deviation 1270 Aberdeen Street Hawkebury, ON K6A 1K7 CANADA TEL: 1 813 832-5200 Email: sales@dartaerospace.com www.dartaerospace.com Container No: S119968 Part: D4148-1 Job No: 184967 Serial No/ Batch: S119968 Revision: _____ Inspector: _____ Exp Date: _____ Instructions: Various STC's Date: 10/20/18				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																																								
Root Cause <table style="width:100%; border-collapse: collapse;"> <tr><td>Environment</td><td>☐</td><td>No Re-verification</td><td>☐</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td><td>☐</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td><td>☐</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td><td>☐</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td><td>☐</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td><td>☐</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td><td>☐</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td><td>☐</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td><td>☐</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td><td>☐</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td><td>☐</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td><td>☐</td></tr> </table>		Environment	☐	No Re-verification	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setup	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testing	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐	<table style="width:100%; border-collapse: collapse;"> <tr><td>☐</td><td>Crushing</td><td>☐</td><td>Positioned Wrong</td></tr> <tr><td>☐</td><td>Heat Treat</td><td>☐</td><td>Outside Dimensions</td></tr> <tr><td>☐</td><td>Wave/Twist in Tube</td><td>☐</td><td>Over/Under tolerance</td></tr> <tr><td>☐</td><td>Marks/Chatter</td><td>☐</td><td>Part Incorrect</td></tr> <tr><td>☐</td><td></td><td>☐</td><td>Part Lost/Missing</td></tr> <tr><td>☐</td><td></td><td>☐</td><td>Part Moved</td></tr> <tr><td>☐</td><td></td><td>☐</td><td>Drawing</td></tr> <tr><td>☐</td><td></td><td>☐</td><td>Finish</td></tr> <tr><td>☐</td><td></td><td>☐</td><td>Misread</td></tr> <tr><td>☐</td><td></td><td>☐</td><td>Turning Sequence</td></tr> </table>			☐	Crushing	☐	Positioned Wrong	☐	Heat Treat	☐	Outside Dimensions	☐	Wave/Twist in Tube	☐	Over/Under tolerance	☐	Marks/Chatter	☐	Part Incorrect	☐		☐	Part Lost/Missing	☐		☐	Part Moved	☐		☐	Drawing	☐		☐	Finish	☐		☐	Misread	☐		☐	Turning Sequence
Environment	☐	No Re-verification	☐																																																																																									
Design	☐	Operator	☐																																																																																									
Doc/Data	☐	Offset/Setup	☐																																																																																									
Equip/Tooling	☐	Supplier	☐																																																																																									
Handling/Pre	☐	Training	☐																																																																																									
Material	☐	Use for Testing	☐																																																																																									
Internal Transport	☐	Poor Information	☐																																																																																									
Tribal Knowledge	☐	Rushing	☐																																																																																									
LOA	☐	Product Improvement	☐																																																																																									
Substation	☐	Process Improvement	☐																																																																																									
Past Expiry Date	☐	Manufacturing Process	☐																																																																																									
Misidentified	☐	Past Due	☐																																																																																									
☐	Crushing	☐	Positioned Wrong																																																																																									
☐	Heat Treat	☐	Outside Dimensions																																																																																									
☐	Wave/Twist in Tube	☐	Over/Under tolerance																																																																																									
☐	Marks/Chatter	☐	Part Incorrect																																																																																									
☐		☐	Part Lost/Missing																																																																																									
☐		☐	Part Moved																																																																																									
☐		☐	Drawing																																																																																									
☐		☐	Finish																																																																																									
☐		☐	Misread																																																																																									
☐		☐	Turning Sequence																																																																																									
OTHER : _____																																																																																												